

REBOUND

The rebound effect is the ability of the hose to regain its original shape after compression by shoe or roller.

ROTATION SPEED

The faster the pump rotation, the faster the shoe moves over the hose. And the more friction is produced, increasing hose temperature - one of the primary causes of hose delamination. High rotation speed can also cause buckling when the hose cannot cope adequately with the shoe speed and stretching results.



UNIFORMITY

A uniform wall thickness makes for uniform occlusion.



1. Outer layer from material with the best mechanical features
2. Nylon cord layers
3. Inner layer from different types of material






SHIMMING

Shim right! Correct

shimming practice is essential to optimizing hose life and operational efficiency. The hose must close fully during compression; under-occlusion causes backflow leading to cracks in the hose, but excessive pressure can damage the hose.

Discharge pressure, fluid temperature and pump rotation speed are all key considerations when shimming.



| Material | Colour code | Max Temp. | Working pressure | Properties |
|------------------|---|-----------|------------------|---|
| NR |  | 80°C | 16 bar | Outstanding abrasion resistance. Generally resistant to diluted acids and alcohols. Highly resilient with excellent abrasion resistance. This is the most widely-used peristaltic hose. Generally suitable in lightly corrosive chemical applications and with abrasive slurries etc. |
| NBR |  | 80°C | 16 bar | Resistant to oils, alkalis, greases and detergents. The inner layer is from NBR and the outer layer is from NR to afford the optimal mechanical resistance. |
| NBR Food (black) |  | 80°C | 16 bar | For all food products including oils and greases. Complies with food grade standards EC 1935/2004. The inner layer is made of black NBR food grade approved for hygienic applications. The outer layer is made of NR for optimal mechanical resistance. |
| EPDM |  | 90°C | 16 bar | High chemical resistance to concentrated acids, corrosive chemicals, ketones. The inner liner is made of EPDM and the outer is made of NR for optimal mechanical resistance. |
| Hypalon / CSM |  | 80°C | 16 bar | For highly corrosive products and high concentration acids. The inner layer is made from Hypalon/CSM and the outer from NR for optimal mechanical resistance. |

For more information about OVATIO hoses and lubricants please contact:
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ANQ/US/EN/0949/0521

All you need to know about peristaltic hoses & lubricants



...and all you need to know about OVATIO

The peristaltic hoses and lubricants you use in your processes are as vital as the pumps themselves. Our OVATIO hoses and lubricants are specifically designed and manufactured to optimize the operation of the pumps. Their contribution is vital.

Optimized to suit your application, optimized for durability

Drawing on more than fifty years of experience of peristaltic hose pump technology and industrial processes, has pushed our OVATIO hoses into the very forefront of hose design and manufacture. And, as you'd expect, they're manufactured to withstand even the very toughest pumping tasks.

OVATIO hose design eliminates the common problems of:

- **Tear and abrasion resistance** (both through their unique mix of polymer/rubber compounds and our vulcanization process)
- **Rebound effect** (through a unique combination of nylon cord reinforcement layers)
- **Inconsistent wall thickness and uneven surfaces** (through very tight manufacturing tolerances)

And out in the real, process world, our **OVATIO hoses have proven their superiority in a wide range of applications and under some extreme operating conditions.**

| Industry | Application | Pressure [bar] | Temperature [°C] | Hose material | Continuous or batch duty |
|--------------------|--|----------------|------------------|---------------|--------------------------|
| pet food | caramel | 8 | ambient | NBR | batch |
| food | mustard | 10 | ambient | NBR | batch |
| food | potato pulp | 11 | 65 | EPDM | batch |
| food | dough | 7 | ambient | NBR | batch |
| food | food additives | 3 | ambient | NBR | batch |
| food | animal fat | 6 | 60 | NBR Buna | continuous |
| food | hot carrageenan | 12 | 90 | NR | batch |
| brewery | waste yeast | 4 | ambient | NBR | batch |
| cosmetics | cosmetics | 3 | ambient | EPDM | batch |
| cellular concrete | concrete production | 12 | 20 | NR | continuous |
| cellular concrete | mortar | 12 | 20 - 50 | EPDM | batch |
| construction | cement and lime slurry | 8 | ambient | NR | batch |
| mining | abrasive slurry with varying viscosity and density | 9 | ambient | NBR | continuous |
| mining, foundry | magnesium sulfate | 8 | 70 | NR | batch |
| mining, foundry | abrasive sludge | 15 | 65 | NR | continuous |
| ceramic | ceramic paste | 6 | ambient | NR | continuous |
| ceramic | mortar | 1,4 | 20 | NR | batch |
| energy | lime slurry | 11 | ambient | NR | continuous |
| energy | cooling water with refrigerants | 2 | ambient | NR | continuous |
| paper | paper pulp | 6 | ambient | NR | batch |
| water / wastewater | waste water | 5 | 20 | NR | batch |



*Abrasive liquids with up to 80% solids in suspension